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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/812,473

03/30/2004

Jeffry N. Zolkower

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07/25/2006

DELPHI TECHNOLOGIES, INC.

M/C 480-410-202

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EXAMINER

HAUGLAND, SCOTT J

ART UNIT

PAPER NUMBER

3654

DATE MAILED: 07/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/812,473	Applicant(s) ZOLKOWER, JEFFRY N.	
	Examiner Scott Haugland	Art Unit 3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Webber et al (U.S. Pat. No. 6,648,260) in view of Rohrle (U.S. Pat. No. 6,216,972).

Webber et al discloses a dual level load limiting belt retractor comprising: a housing 132 having a rotatable take-up spool 136 connected to a belt, a lock 150 for locking the take-up spool against rotation in a pay-out direction, a first torsion bar 138 to provide a high level load limit for resisting paying-out the belt, a second torsion bar 144 to provide a low level load limit, and a switching mechanism 149 to switch between the high level load limit and the low level load limit.

Webber et al does not disclose an auxiliary load limit mechanism.

Rohrle teaches providing a seat belt reel with an energy absorbing mechanism including a torsion bar 102 coupled to a deformable generally C-shaped wire 22 to provide a more desirable limiting force on the seat belt (col. 4, lines 42-55). The wire 22 passes through curved passages in duct 20 formed by baffles and anvils and is wound into a circular shape.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the seat belt retractor of Webber et al with an auxiliary load limit mechanism associated with at least the second torsion bar and comprising a generally C-shaped wire disposed in a sinous guide having a plurality of curved passages that permanently reshape the wire as taught by Rohrle to provide a more desirable load limiting force curve than is produced by a torsion bar alone.

Claim 4, 6-8, and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Webber et al (U.S. Pat. No. 6,648,260) in view of Rohrle (U.S. Pat. No. 6,216,972) as applied to claims 1, 3, and 9 above, and further in view of Tsuge et al (U.S. Pat. No. 4,323,205).

Webber et al does not disclose that the wire has a circular cross section.

Tsuge et al teaches using a wire having a circular cross section as a load limiting member in a seat belt retractor.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the seat belt retractor of Webber et al as modified with an auxiliary load limiting mechanism comprising a wire having a circular cross section as taught by Tsuge et al to allow the wire to extend axially as it is wound, reducing the space required in the radial direction.

Response to Arguments

Applicant's arguments filed 5/10/06 have been fully considered but they are not persuasive.

Applicant argues that Webber et al does not suggest an auxiliary mechanism to supplement the load limit during switching from high level load limit to low level load limit and that Rohrle only has a single torsion bar, has no switching mechanism, and does not teach an auxiliary mechanism to supplement the load when switching torsion bars. However, Rohrle teaches providing a retractor with an auxiliary load limit mechanism associated with a torsion bar to improve the load limiting characteristics of the retractor. It would have been obvious to an ordinary artisan from the teachings of Rohrle to provide an auxiliary load limit mechanism in association with the second torsion bar of Webber et al to improve the load limiting characteristics of that torsion bar. The auxiliary load limit mechanism of the modified device would operate when the second torsion bar is activated to enable the low level load limit as in Applicant's apparatus.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Haugland whose telephone number is (571) 272-6945. The examiner can normally be reached on Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on (571) 272-6951. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


sjh
7/20/06


JOHN Q. NGUYEN
PRIMARY EXAMINER